

ABSTRACT

A method of forming an SPVG SONOS memory. First, a substrate having a well and a plurality of select gate structures is provided. Then, a plurality of sacrificial spacers are formed alongside each select gate structure, and an implantation process is performed to form a doped region in the well between any two adjacent select gate structures. Afterward, the sacrificial spacers are removed, and a composite dielectric layer is formed on the select gate structures and the substrate. Finally, a plurality of word lines are formed on the composite dielectric layer.